



**Response to Questions and Issues from Executive, Technical
and Advisory Committee Members
April 17, 2001**

Is it feasible to have both I-90 and SR 520 as potential HCT crossings?

The proposed multi-modal alternatives include either BRT/HOV facilities in both corridors or fixed guideway in one corridor and BRT/HOV in the other. Neither ridership demand nor downtown Seattle bus capacity constraints require exclusive right-of-way transit in two corridors across the Lake. And, there would be both additional costs and environmental impacts associated with preserving ROW in the 520 corridor for a future fixed guideway facility. Bridge pontoons would need to be larger, any lids wider, and in some locations the highway footprint wider.

BRT/HOV in the I-90 corridor will be facilitated by current Sound Transit/WSDOT HOV projects (I-90, Mercer Island, Eastgate, and Issaquah). BRT/HOV in the SR 520 corridor will be facilitated by a buffer separated HOV lane and connections into key activity centers.

Why is a Madison Avenue route not being considered for HCT?

Remember that the current screening exercise is to choose the preferred Lake Crossings corridor for HCT. Future detailed studies will identify specific east and west side routings

A preliminary investigation of this alignment has resulted in the following facts:

- Madison Avenue has grades of up to 11.5%
- Current HCT technologies, whether steel rail, rubber tire or air cushion and magnetic levitation systems, experience performance degradation when operated on sustained grades in excess of 5%. Steeper grades result in slower speeds due to limitations of the propulsion and braking systems as well as issues associated with passenger comfort.
- An elevated structure would need to be ~80 feet high in Madison Valley, using a 5% grade.
- Ridership across Lake Washington is not likely to be substantially higher.

Will Jim McIsaac's proposal be evaluated further by the team?

Mr. McIsaac's suggestion is to begin/end any added general purpose lanes at Montlake and then to/from the eastside. It also includes an added consideration of making the westbound (on and off) ramps at Montlake HOV only. The proposed multi-modal alternative #6 includes terminating all new general purpose capacity at Montlake and this design option can be included in any alternative that adds general purpose capacity. None of the alternatives currently include making the westbound on and off ramps at Montlake HOV only. This is because that it would force all the general purpose traffic back through the arterial neighborhood street system. Today, approximately 12,000-15,000 vehicles use each of these ramps daily; a conservative estimate would push about 10,000 vehicles to other streets.

How were the assumptions for I-90 selected for the proposed multi-modal alternatives?

All of the multi-modal alternatives include 8 lanes of traffic on I-90. The multi-modal alternatives with fixed guideway transit in the I-90 corridor revise the current lane configuration to 3 general purpose lanes and one HOV lane in each direction. The multi-modal alternatives with HOV/bus service in the I-90 corridor retain the current lane configuration of 3 general purpose lanes in each direction plus 2 center reversible lanes.

Regardless of which assumption is part of the multi-modal alternative evaluation, based on the experience of the technical team, it is not expected that it will create a more than a 2% difference in the SR 520 model results.

What are the assumptions in the no action alternative (#1)?

The following assumptions are part of the no action alternative:

- No further capital investment in the corridor.
- The bridge continues to remain floating (i.e., will not include estimate of costs if bridge does not continue to function as it does today).

How will the I-405 preliminary preferred alternative affect demand on SR 520?

Based on the results of the I-405 Corridor Program to date, it appears that most of the added capacity to I-405 will be serving eastside patterns. This will result in very little effect on SR 520 due to the existing and projected congestion in the corridor. The I-405 preliminary preferred alternative has not been modeled with any of the eight proposed multi-modal alternatives. It is important to remember, that even with added capacity on SR 520 and the existing I-405 configuration, the lake crossing is at capacity. A sensitivity test will be developed to determine the affects of the I-405 preliminary preferred alternative with Trans-Lake alternatives that include added capacity.

What are the assumptions in the safety and preservation alternative (#2)?

The following assumptions are part of the safety and preservation alternative:

- No capacity increases.
- Replacement of the floating bridge with full shoulders.
- Replacement of the westside fixed spans, including Portage Bay Viaduct with full shoulders.
- Added bicycle/pedestrian facilities to the corridor.

Which alternatives include a realignment of SR 520?

Each build alternative includes realignment at:

- Shifting the Portage Bay Viaduct to Foster Island north approximately 100 feet.
- Shifting the floating bridge north approximately 100 feet.
- Other design options include shifting I-405 interchange north, and possible shifts north at 108th and Bellevue Way interchange.

The alignment would be shifted to improve construction staging, improve safety (design standard, sight distance), accommodate new ramp connections, and construction of a new floating bridge without closure of the existing facility.

Do the alternatives allow for bus/HOV direct access to the University District other than on Montlake Boulevard?

Yes. This option is accommodated in Alternatives 3, 4, and 7.

Please consider an additional alternative to add HCT *only* to the existing roadway configuration on SR 520, with no additional highway capacity.

The current Sound Transit long-range vision has HCT on I-90. However, the prior Study Committee determined HCT should only be considered on SR 520 *in addition* to adding HOV or HOV and general purpose lanes.

Alternatives that add general purpose capacity to SR 520 should not be considered.

This proposal has twice been examined by the Executive Committee. Both times the committee has decided to further consider additional general purpose capacity in addition to HOV capacity. This builds on the prior Study Committee recommendation to analyze additional general purpose capacity in conjunction with an HOV lane.

How are the I-405 Corridor Program and Trans-Lake Washington Project being coordinated?

First, recognize each project has different objectives. The I-405 Corridor Program is in the process of conducting a programmatic environmental impact statement, which may result in project-level environmental impact statements on specific parts of the preferred alternative. The Trans-Lake Washington Project will begin a project-level environmental impact statement in July 2001 based on the recommendations of the Executive Committee. Part of the coordination between the two projects includes the fact that both are being managed through the same WSDOT office (Office of Urban Mobility). Also, Sound Transit is a partner on both projects. The system modeling for both projects is being done under the direction of one person (Cathy Strombom, Parsons Brinckerhoff). Both teams are in routine coordination discussions together as well.